

Date: Wednesday, 02/04/2008 3:39:25 PM
 User: Julie Lecocq

Process Sheet

SPLIT

Customer	: CU-DAR001 Dart Helicopters Services			Drawing Name	: CROSSTUBE EXTRUSION (206B)		
Job Number	: 38335			Part Number	: D6003102		
Estimate Number	: 10026			Drawing Number	: D6003 REV A		
P.O. Number	:			Project Number	: N/A		
This Issue	: 02/04/2008 S.O. No. :			Drawing Revision	: A		
Prsht Rev.	: NC			Material	:		
First Issue	: / / Type : RMA			Due Date	: 20/11/2008 Qty: 10		
Previous Run	: 29116			Comment	Um: Each		
Written By	:			Checked & Approved By	: JO 08.04.03		
Comment	: Est Rev:B 00.12.06 Added: Issue P/O EC						

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	PG	PURCHASING
	Comment: PURCHASING	
	Issue P/O <u>6004</u>	<u>C 608/04/04</u>
	a) Extrude as per Dwg D6003	(39)
	b) Material: 7075-T6/T6511 (WW-T-700/7 or QQ-A-225/9	
	or QQ-A-200/11) seamless aluminum tube	
	c) Minimum ultimate tensile strength = 77 ksi	
	d) Minimum tensile yield strength=66 ksi	
	e) Material certification required	
2.0	D6003102P	Crosstube
	Comment: Qty.: 1.0000 Each(s)/Unit Total : 39.0000 Each(s)	
	Crosstube	
3.0	PACKAGING 1	PACKAGING RESOURCE #1
	Comment: PACKAGING RESOURCE #1	
	Receive & Inspect For Transit Damage	
	Ensure material certification is attached	
4.0	QC6	DIMENSIONAL CHECK
	Comment: DIMENSIONAL CHECK	
	Ensure Material certification comply to Dwg D6003	<u>5/28/08/23</u> (10)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: CROSSTUBE EXTRUSION (206B)

Job Number: 38335

Part Number: D6003102

Job Number:



Seq. #: Machine Or Operation:

Description :

5.0 HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 0054.1

✓ a / 4 Soekal/23

6.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *HALL*

→ 08/10/23 A/W/M

7.0 QC21

FINAL INSPECTION/W/O RELEASE



08/10/23 PJ

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 08-10-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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NOTE: Date & initial all entries

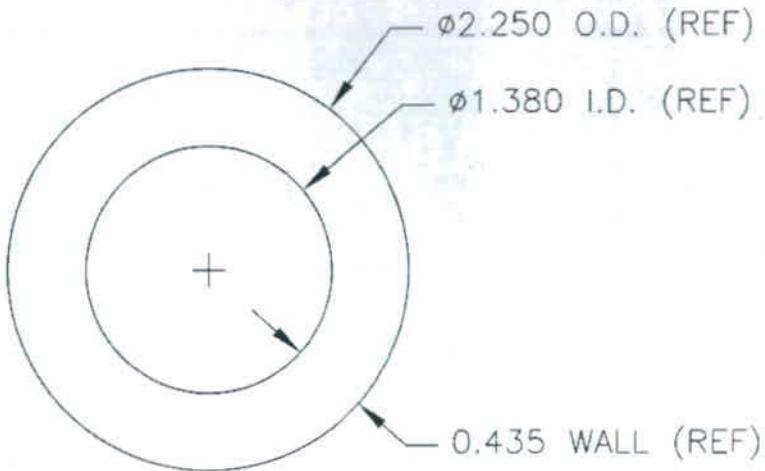


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DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. A
		D6003	SHEET 1 OF 1
DATE	TITLE	SCALE	
00.11.22	CROSSTUBE MATERIAL	1:1	
A	00.11.22	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
00.11.24



NOTES

1) D6003-XXX CROSSTUBE

LENGTH

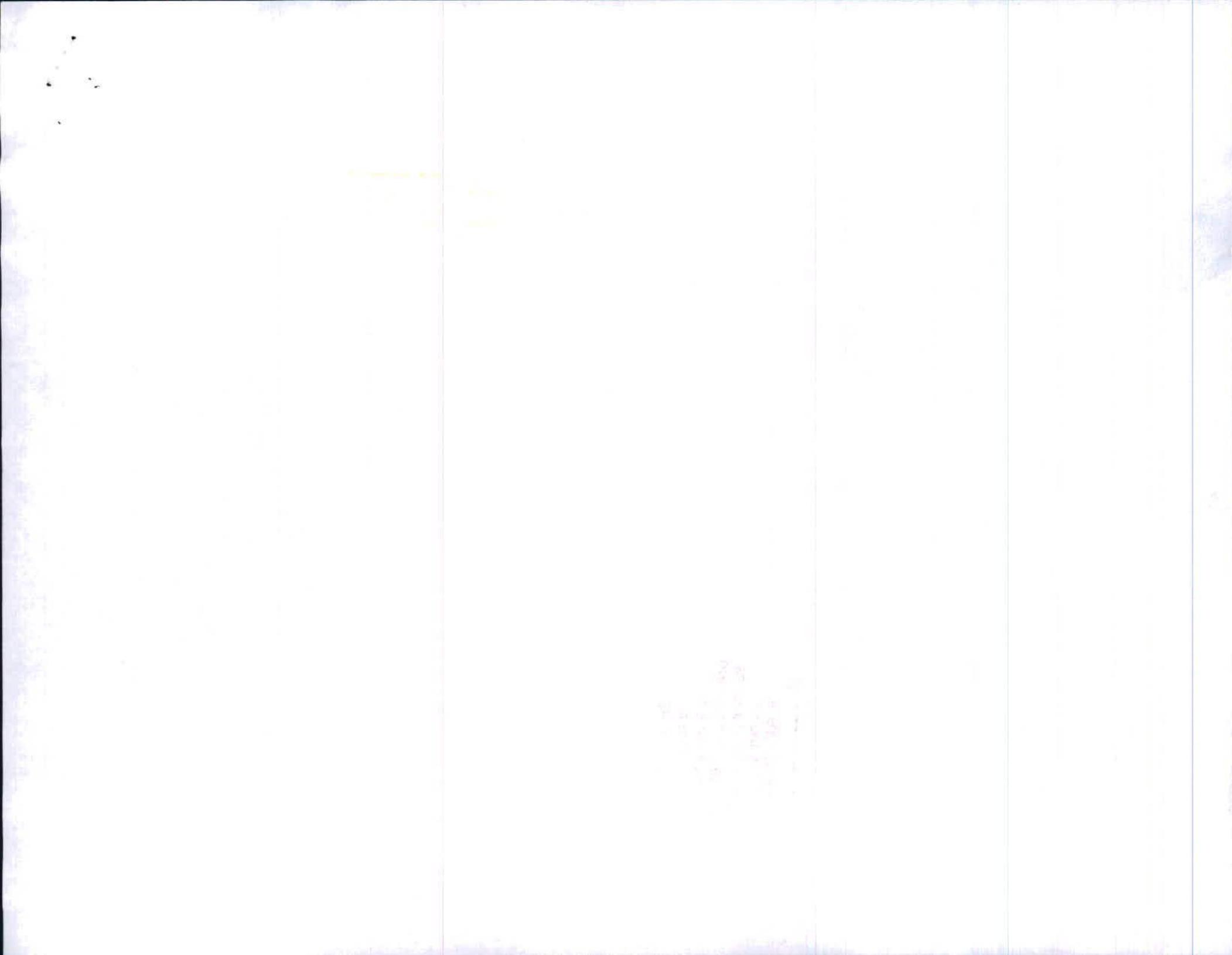
WHERE XXX IS LENGTH IN INCHES
EG. 102" LONG TUBE: D6003-102

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 38335

- 2) MATERIAL: 2.250 OD x 0.435 WALL 7075-T6/T6511 (WW-T-700/7 OR QQ-A-225/9 OR QQ-A-200/11) SEAMLESS ALUMINUM TUBE.
MINIMUM ULTIMATE TENSILE STRENGTH = 77 ksi
MINIMUM YIELD TENSILE STRENGTH = 66 ksi
- 3) TOLERANCES ARE PER ASTM B210 AS FOLLOWS:
O.D.: ± 0.006 MEAN (± 0.012 INCLUDING OVALITY)
WALL: ± 0.020 MEAN (± 0.044 INCLUDING ECCENTRICITY)
LENGTH: XXX $+0.125/-0.000$
STRAIGHTNESS: 0.010" DEVIATION / 12" LENGTH
- 4) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 5) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

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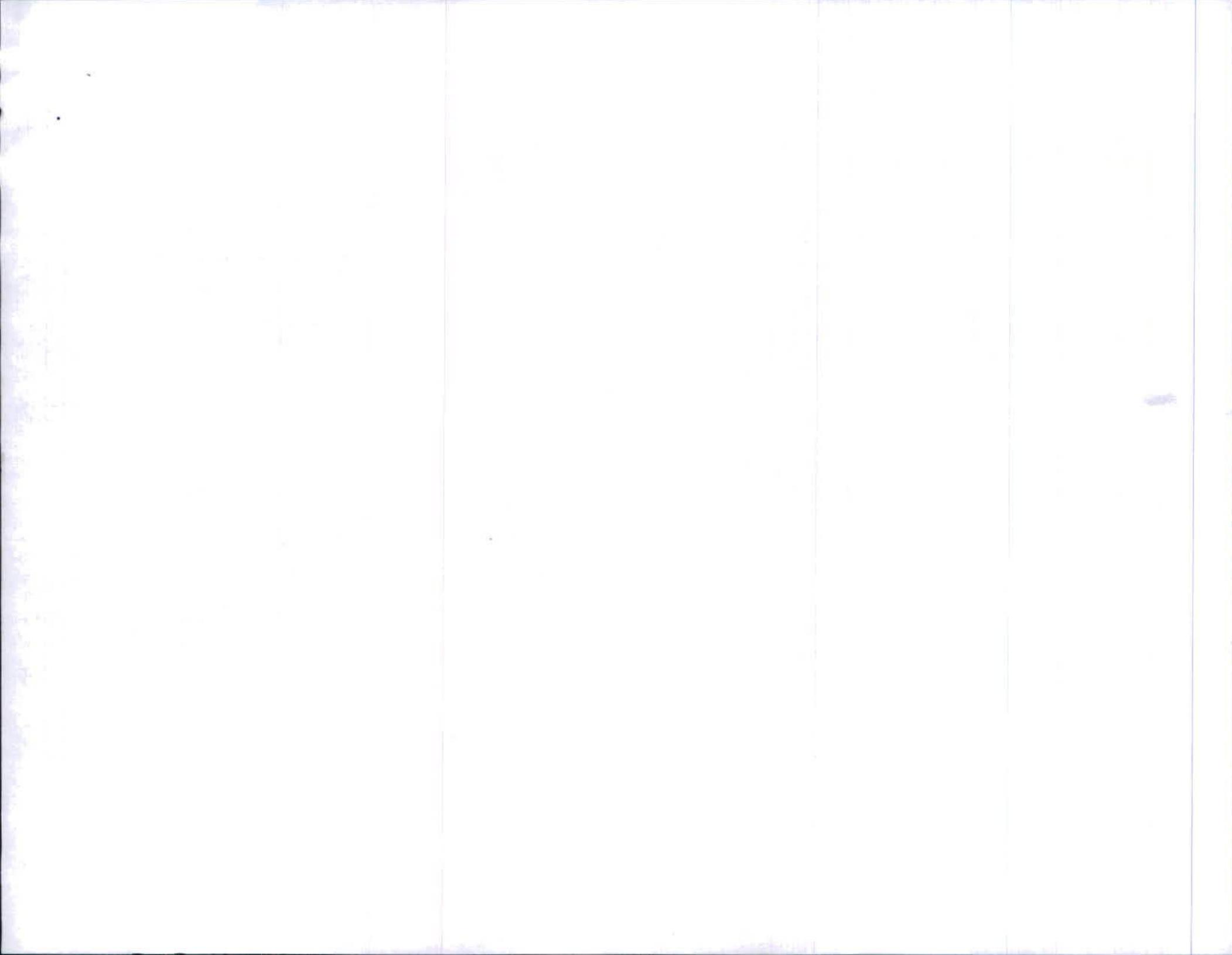
Packinglist ALUnna AG

Customer PO	PO. 0006064
ALUnna ref. no.	29105/1
Date:	09.25.08

We hereby declare that the wooden packing material are totally free from bark and apparently free from live plant pests.

Boxmarking:

Dark Aerospace PO. 00006064
D 6003-102 Made in Germany
Dest. Hawkesbury Ont. Canada



Abnahmeprüfzeugnis 3.1 - EN 10204:2004

Inspection Certificate 3.1 - EN 10204:2004 / Certificat de Reception 3.1- EN 10204:2004

Kunde: Dart Aerospace Ltd.
 Client:

1270 Aberdeen Street
 K6A1K7 Hawkesbury, ON Canada

Produkt: Rohre nahtlos gepresst
 Product / Produit:
 Tubes seamless extruded

Spezifikation: AMS - QQ - A - 200/11E; Spécification Dart Aerospace D6003
 Specification:

Werkstoff: 7075
 Alloy/Alliage:

Abmessung
 Size / Dimension
 2,250 INCH x 1,380 INCH x 0,435 INCH x 102,000 INCH
 D6003-102 2.250 x 0.435 x 102

Kennzeichnung
 Marking/Marquage:
 ALUnna - Cert No. 1454/08 - 7075 - T 6511 - Cast No. 81742 - AMS - QQA 200/11 - 2.250" OD X 0.435" Wall - Heat
 Lot No. 1859 - ALUnna Order Conf. No. 29105/1-1 PO. 00006064

Lieferung
 Delivered Material / Matériel délivré:
 pcs. lbs
 10 256
 Country of Manufacture: Germany

G
 06/06/23

1. Chemische Analyse

Chemical Analysis / analyse chimique

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Zr	Bi	Sn	Ni
Charge/ Cast No.	min.			1,2	2,1	0,18	5,1						
	max.	0,40	0,50	2,0	0,30	2,9	0,28	6,1	0,20				

81742	0,07	0,13	1,38	0,04	2,45	0,19	5,73	0,04	0,01	0,03	0,01	0,01	0,0001
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Hydrogen content:<0,10

ccm/100 g Al Elements without indication < 0,01 %

country of melt manufacturer: Germany

2. Mechanische Eigenschaften

Mechanical Properties / Valeurs Mécaniques

Anforderungen Requirements	tensile (Rm) ksi	yield (Rp0,2) ksi	elongation 2" %	elongation A %	Hardness HB	Heat Lot No.
	min. max.	77,0	66,0			
1	87,580	81,055	10,0			1859 - 10 pcs.

RMS: outside 25 - max. 16,1 μ "

Ergebnis der Prüfungen: Es wird bestätigt, daß die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellannahme entspricht

Test results: We confirm that the delivery has been tested and applies to the agreements made on receipt of the order
Resultats: Nous confirmons que la livraison a été contrôlée et correspond avec les conventions faites à la réception de la commande

